Top 25 Rollouts of 2010

During a lean economy, manufacturers introduced new products and equipment that feature increased fuel efficiency, increased productivity, and cost savings.

by Kerry Clines, Senior Editor
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ATLAS COPCO CONSTRUCTION EQUIPMENT

Breaker with improved box design

Atlas Copco's new HB 3100 hydraulic breaker has a service weight of 6,944 pounds and fits carriers in the 66,139- to 114,640-pound class. Features include the VibroSilenced System for reduced noise and vibration, AutoControl that adapts blow frequency and impact energy to the hardness of the rock, the ContiLube II automatic lubrication system, StartSelect that matches the start up and shut down process to the application, the PowerAdapt system that shuts down the breaker when oil pressure exceeds the maximum input value, and an improved box system for better stability and resistance.

Write 1 on reader card.

DOOSAN INFRACORE CONSTRUCTION EQUIPMENT

Large crawler excavator

Doosan's new 72.1-metric-ton DX700LC crawler excavator features an operating weight of 158,953 pounds with standard boom and arm and a 4.32-cubic-yard bucket. Bucket breakout force is 78,485 pounds with the standard bucket; arm breakout force is 64,595 pounds. The machine's long carriage design, combined with the 13-foot, 11-inch-wide fully expanded undercarriage, offers stability and safety. Additional features include a high swing torque of 48,369 pounds with swing speed of 7.1 revolutions per minute, 500-hour engine service intervals, wide side access doors, a large-capacity engine air pre-cleaner, dual fuel pre-cleaners, and a PC monitoring function that enables connection to the e-POS system.

Write 7 on reader card.

How we made our choices

When we ask readers how we can best help them keep track of changes in the products and services they use to produce aggregates, almost everyone wants an annual short list of the really important stuff.

No wonder. The sheer volume of introductions is overwhelming. *Aggregates Manager* covers dozens of products each year in its *RollOuts* departments and *Supply Lines* features.

So each year, our staff reviews all the product introductions we've covered for the past year (our *Top RollOuts* "year" actually runs from the December 2009 issue through the November 2010 issue) to pick out 25 that we believe are worth further review. Our priorities are new concept products — which are rare — new series/new generation products in categories that relate to the aggregates industry, and other rollouts which serve our readers' interests by increasing competition in a product category.

Inevitably, we omit deserving products, either because we just didn't understand the significance of the product or because the announcing company didn't communicate what was special about the product, or both. In either case, we apologize in advance for these omissions.

BRIDGESTONE AMERICAS OFF ROAD TIRE DIVISION

Off-road tire offers comfort, stability

Bridgestone's new V-Steel J-Traction (VJT) radial off-road tire for loaders features a computer-optimized center block that minimizes vibration levels to create improved operator comfort and stability, extended tire life through improved wear resistance, enhanced sidewall design for improved cut resistance, and a specialized self-cleaning tread design and non-directional tread pattern. The tire is available in three sizes — 20.5R25, 23.5R25, and 26.5R25 — with 17.5R25 and 29.5R25 coming soon.

Write 3 on reader card.

UNIFIED SCREENING & CRUSHING

Increased production throughput

Unified Screening & Crushing's new SuperFlow screens are a hybrid of wire cloth and urethane support strips. Each wire is said to vibrate independently to provide a harmonic frequency that reduces plugging and blinding, improving throughput performance by as much as 30 percent. The company says the screens perform well when screening dry material, but are especially productive when handling wet or sticky material. The screens are available in three styles.

Write 23 on reader card.

W.S. TYLER

Washes aggregate using less water

W.S. Tyler says its new Hydro-Clean washing units clean aggregate while reducing water consumption by up to 75 percent over traditional log washers. The units use high-pressure nozzles rotating at 90 revolutions per minute to spray up to 90-percent recycled water on material with pressures up to 2,900 pounds per square inch, removing silt and clay particles as small as 63 microns and processing up to 400 tons per hour, depending on model size and application. Water consumption ranges from 27 to 211 gallons per minute, depending on application and model size; power requirements are no higher than 300 horsepower (225 kW) on the largest model. The units are available in four model sizes that produce 20 to 400 tons per hour.
Write 25 on reader card.

CASE CONSTRUCTION EQUIPMENT

Updated loader/backhoe line

Case's new 590 Super N, the largest loader/backhoe in the company's N Series, features a 108-horsepower, 4.5-liter, turbocharged engine. The company describes the N Series as "stronger everywhere," touting increases in backhoe breakout force and lift, along with increased loader breakout force, lift, and reach. A new Power Lift system is said to channel hydraulic power directly to the boom, increasing lift capacity by as much as 39 percent. Three transmissions are available — Powershift S-Type, Powershift H-Type, and Powershuttle. New side lighting illuminates the entire perimeter of the machine.
Write 5 on reader card.

CATERPILLAR, INC.

Tier 4 Interim/Stage IIIB engines

Caterpillar's five new Tier 4 Interim/Stage IIIB Technology industrial engines — C13 Acert, C15 Acert, C18 Acert, C27 Acert, and C32 Acert — range from 385 to 1,200 brake horsepower, respectively, and are available with an extensive choice of options suited to meet original equipment manufacturer and end-customer requirements across a wide range of heavy-duty applications.

CARDINAL SCALE MANUFACTURING CO.

Heavy-duty weighing

Cardinal Scale's new low-profile Yukon truck scale is designed specifically for mining and off-road vehicle weighing, featuring a 150-ton capacity with high 70-ton concentrated load capacity. The scale is available in impervious hydraulic or electronic scale types and features extra-wide 12-, 14-, and 16-foot scale platforms.
Write 4 on reader card.

ATLAS COPCO CONSTRUCTION MINING TECHNIQUE USA

Matches power percussion to the rock

Atlas Copco's new ROC T35M drill rig features the COP 1840 rock drill with 18 kW of drilling power to drill holes ranging from 2.5 to 4 inches in diameter to a depth of 82 feet. Powered by a 190-horsepower Cummins QSB 6.7 Tier III engine capable of 2,300 revolutions per minute, the rig matches percussion power and feed to the rock. The unit features a single joystick control and a carousel with rocker switch rotation that can handle up to six, 12-foot rods plus a 14-foot starter rod.
Write 2 on reader card.

HYUNDAI CONSTRUCTION EQUIPMENT AMERICAS, INC.

Load-sensing hydraulic system

Hyundai's new HL770-9 wheel loader features a new load-sensing hydraulic system, fully automatic power shift transmission with variable shift control, multi-stage clutch cut-off, integrated payload system, auto-reversing cooling fan, large cab with improved visibility, air-ride seat with optional joystick steering, a 5.5-cubic yard bucket, an integrated rear-view backup camera, removable housing doors for easy access to coolers and engine components, and access ladders with large steps and a 20-degree incline for safer access to the cab. The machine also features a GPS-capable satellite system (Hi-Mate) that monitors machine functions, fuel efficiency, and diagnostics through an online portal.
Write 8 on reader card.

KOMATSU AMERICA CORP.

Hybrid excavators come to North America

Komatsu's 138-horsepower, 20- to 22-ton PC200LC-8 hybrid excavator has an operating weight of 43,643 to 47,260 pounds and a bucket capacity of 0.66 to 1.57 cubic yards. The machine's hybrid system works on the principle of swing energy regeneration and energy storage through the use of an electric swing motor. The kinetic energy generated during the swing braking phase is converted to electricity, which is sent through an inverter and captured by the capacitor. The captured energy is then discharged quickly for upper structure rotation and to assist the engine when accelerating under work load conditions. Tests comparing the hybrid to Komatsu's standard excavator showed a 25- to 40-percent reduction in fuel consumption, according to the company.

Write 9 on reader card.

KPI-JCI, AN ASTEC COMPANY

Portable, easy to operate equipment line

KPI-JCI says the high crushing capacity of its new GT200 cone crusher plant, one of the company's new affordable line of Global Track Series equipment, creates more saleable materials per pass, saving time and increasing profitability. The crusher's dual-motor design allows for quick closed-side setting adjustments to ensure precision while crushing.

Write 10 on reader card.

VOLVO CONSTRUCTION EQUIPMENT NORTH AMERICA, INC.

High-production, fuel-efficient wheel loaders

Volvo says its new L220F wheel loader is the toughest of its F-Series line, featuring a breakout force of 50,470 pounds and a bucket capacity of 7.1 cubic yards. The Tier 3-certified V-ACT engine provides high torque at lower speeds, allowing the engine to operate with low levels of noise and exhaust emissions. Other features include the new OptiShift, with patented Reverse by Braking; a patented T-linkage, lift-arm system; and an ergonomically designed machine operator's cab (Care Cab) with improved sound and vibration dampening. All F-series wheel loaders are 95-percent recyclable.

Write 24 on reader card.

LIBRA SYSTEMS CORP.

Self-service ticket kiosk and print terminal

Libra Systems' self-service kiosk allows for more truck traffic at the scale without increasing costs. The kiosk frees up scale house operators, reduces data entry and ticket errors, reduces in-yard times, quickly and automatically identifies trucks, and controls truck flow.

Write 11 on reader card.

TCI MANUFACTURING

Floating conveyor

TCI Manufacturing's new floating transfer conveyors are designed to work with the company's bucket dredge to transport materials across water. The conveyors are built with a swivel point for dredge movement and feature a radial-type receiving hopper. Features include a head-end turn style, head-end discharge hood, and a catwalk and handrails around the head end and down the drive side of the conveyor.

Write 20 on reader card.

MAJOR WIRE INDUSTRIES LTD.

Harp wire reduces downtime

Major Wire says its new LFM Harp Wire is manufactured with straight wires firmly molded into polyurethane strips that hold the wires in place at the crown bar, eliminating steel-on-steel wear. The polyurethane strips are said to keep the wires equally tensioned, creating better wire vibration, reducing blinding, and increasing production of a cleaner aggregate. The company says its new wire handles high-impact loads better and lasts up to twice as long as conventional harp and piano wire.

Write 12 on reader card.

MICHELIN EARTHMOVER TIRES

Earthmover tires for rocky terrain

Michelin Earthmover Tires says its new X-Traction tires are now available in North America. The E4 tires are designed for earthmover transport equipment operating in rocky terrain. A new cooling system shoulder design and C2 Technology casing architecture reduce heat build up, allowing trucks to operate continuously at higher speeds. The tires feature 13-percent deeper tread and thicker under-tread rubber for resistance to cuts and impacts.
Write 14 on reader card.

METTLER TOLEDO NORTH AMERICA

Low-profile, high-capacity scales

Mettler Toledo says its VTC221 concrete deck scale incorporates the newly released Powercell PDX load cell network. The scale combines a concrete driving surface with an orthotropic understructure found in steel deck scales for extra strength. Features include a low-profile design; 100,000-pound concentrated load capacity; gross load cell capacity of more than 800,000 pounds; onboard diagnostic capabilities; lightning protection; and a 5-year warranty on parts, labor, and travel.
Write 13 on reader card.

POWERSCREEN, NORTH AMERICA, A TEREX COMPANY

Efficient portable crushing

Powerscreen's Pegson XA750 portable jaw crusher is fitted with a hydraulically driven pan feeder and live prescreening unit with a bolt-in, cartridge-style grizzly section to remove fines and sizes prior to crushing. A 55- by 32-foot unrestricted feed opening prevents bridging and maintains consistent feed. Features include a hydraulically adjustable product conveyor with a 13-foot, 1-inch discharge height; a modular hopper that can be removed for transport; and two-speed tracks for maximum site mobility. The product conveyor can be raised and lowered hydraulically during operation and for transport or maintenance.
Write 15 on reader card.

RICE LAKE WEIGHING SYSTEMS

Weigh on the go

Rice Lake Weighing Systems' new WLS-C compact on-board weighing system for skid steers, wheel loaders, track loaders, and lift trucks offers a compact profile that fits easily into any cab, at an economical price. The system installs with a printer to create an all-in-one mobile weighing and ticketing operation, thereby reducing unnecessary trips to a central scale.
Write 16 on reader card.

ROHR CORP.

Land-based bucket-ladder dredge

Rohr Corp.'s newest development in underwater mining technology, its land-based, bucket-ladder dredge, is new in the United States. The company says the dredge can extract deposits at shallow-water depths of 36 to 40 feet. Once extracted, the material can be stockpiled, conveyed directly from the dredge, or fed onto a haul truck.
Write 17 on reader card.

TEREX CORP.

40-ton articulated truck enters the market

Terex says its new 40-ton TA400 articulated truck features a Tier 3-compliant, fuel-efficient, 450-horsepower diesel engine; maximum rim-pull and gradeability for negotiating inclines; and a large body capacity with low body weight to maximize load size and retention. The truck is equipped with three axles that are locked in permanent all-wheel drive and oil-cooled, wet disc brakes on all six wheels. Maintenance is easy with an electric opening hood, ground-level access to major components, and wide platforms on both sides of the engine.

Write 22 on reader card.

TELSMITH, INC., AN ASTEC COMPANY

Custom-engineered crushing

Telsmith says its new H2238 Hydra-Jaw Series crusher features a hydraulic toggle system with a heavy-duty, custom-engineered, hydraulic cylinder, as well as hydraulic adjustment, relief, and clearing systems that eliminate costly downtime and prevent component damage, while protecting workers. The crusher is engineered with a Pitman Lockout Pin that locks the Pitman in the forward position, allowing the toggle to be retracted and lowered away for maintenance. The unit features a 22- by 38-inch jaw opening and installs on wheeled or tracked mobile units.

Write 21 on reader card.

BRIEFING BOX

Company	Reader Service Number
Atlas Copco Construction Equipment	1
Atlas Copco Construction Mining Technique USA	2
Bridgestone Americas Off Road Tire Division	3
Cardinal Scale Manufacturing Co.	4
Case Construction Equipment	5
Caterpillar	
Doosan Infracore Construction Equipment	7
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KPI-JCI, an Astec company	10
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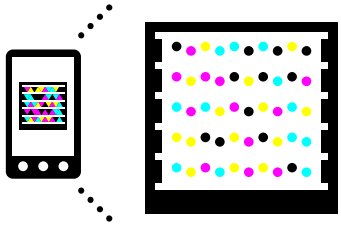

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SANDVIK MINING AND CONSTRUCTION

Purpose-designed tracked impact crusher

Sandvik says it designed its new QI240 tracked impact crusher features mobility, productivity, transportability, and minimal environmental impact. Designed to work in either a secondary or primary capacity, the crusher can operate independently or in conjunction with other crushers. The unit's size and mobility make it perfect for smaller quarries or wherever space is limited.

Write 18 on reader card.

SUPERIOR INDUSTRIES

Portable overland conveyor

Superior Industries says its new Trailblazer Portable Goundline Conveyor System is designed to be towed from site to site and set up within about an hour. The 500-foot, portable, overland conveyor comes fully belted with drives and a gravity-style take-up built into the trailer structure. A fifth-wheel hitch, brakes, and directional lights allow the conveyor to move easily from quarry to quarry, requiring only a small crew for set up.

Write 19 on reader card.

For more information, follow the smart tag to find links to the manufacturers' Web sites.